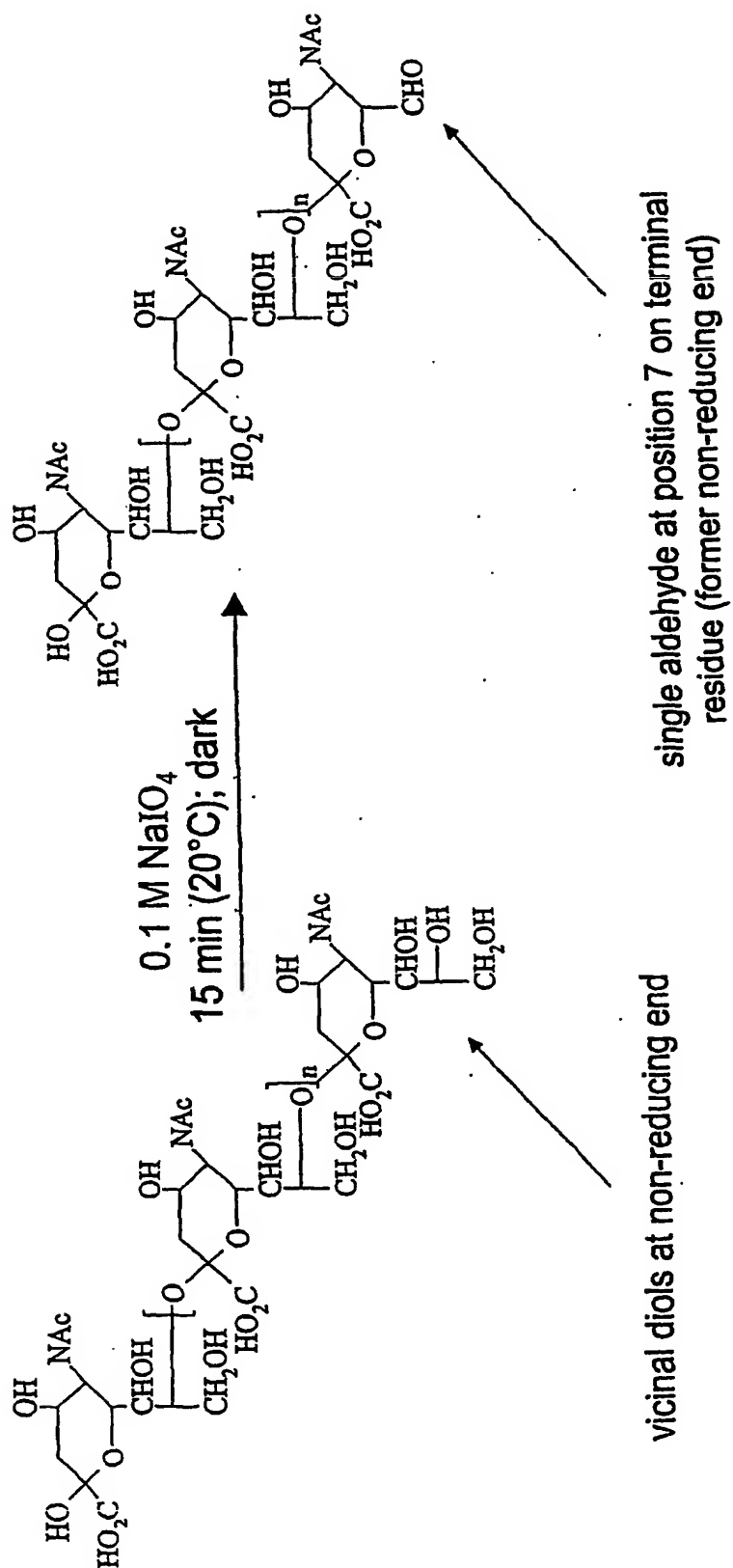


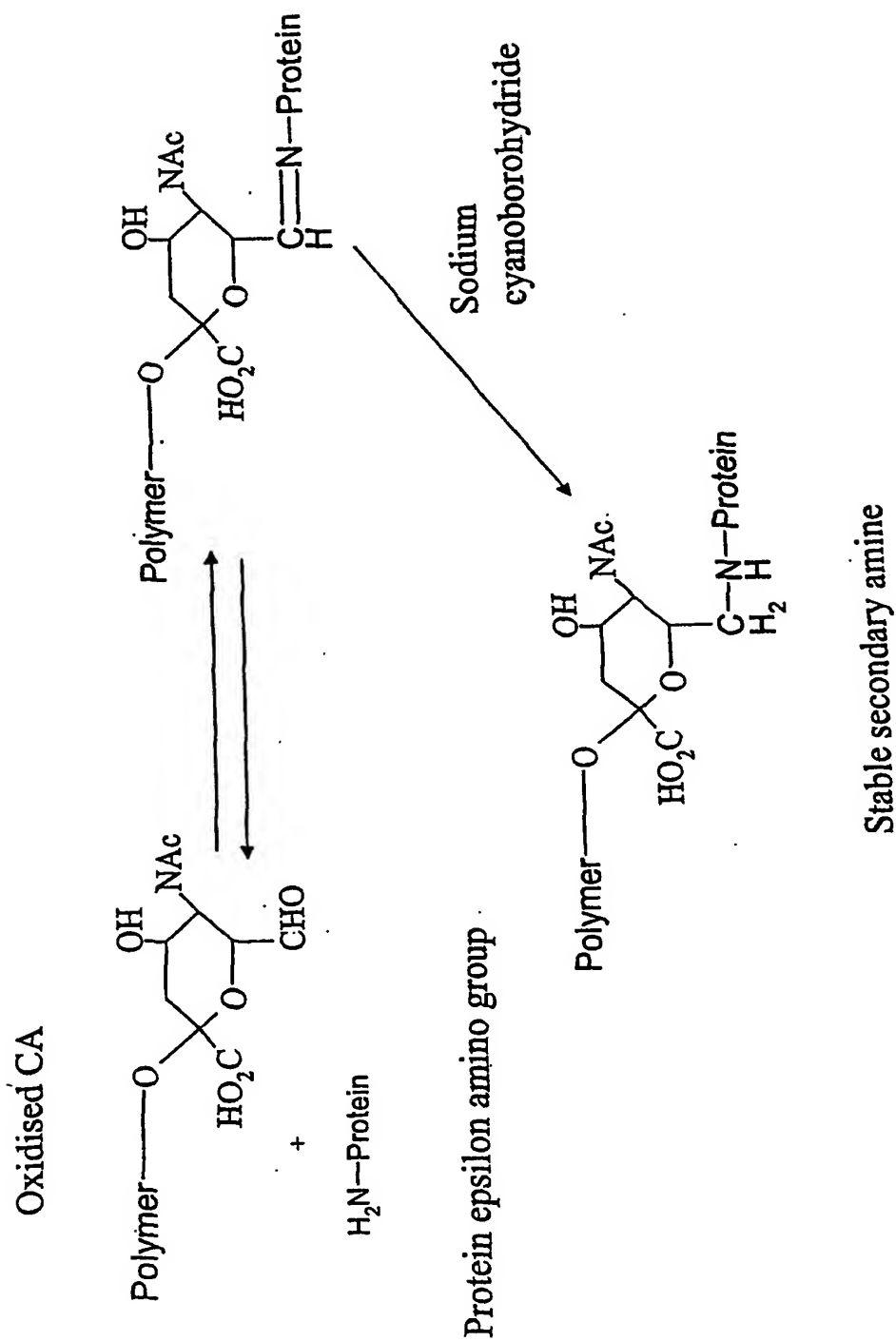
1/23

Figure 1a

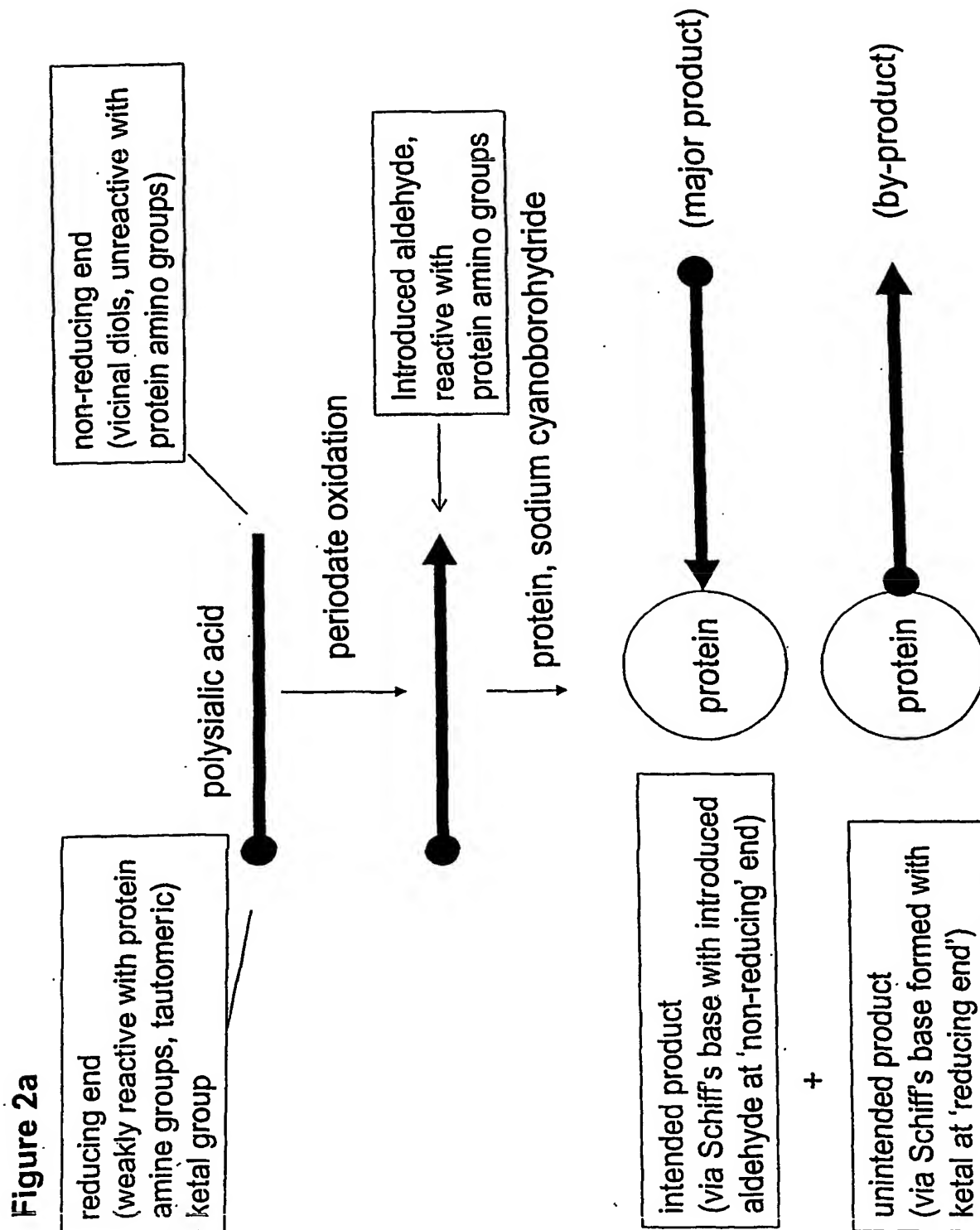


2/23

Figure 1b



3/23



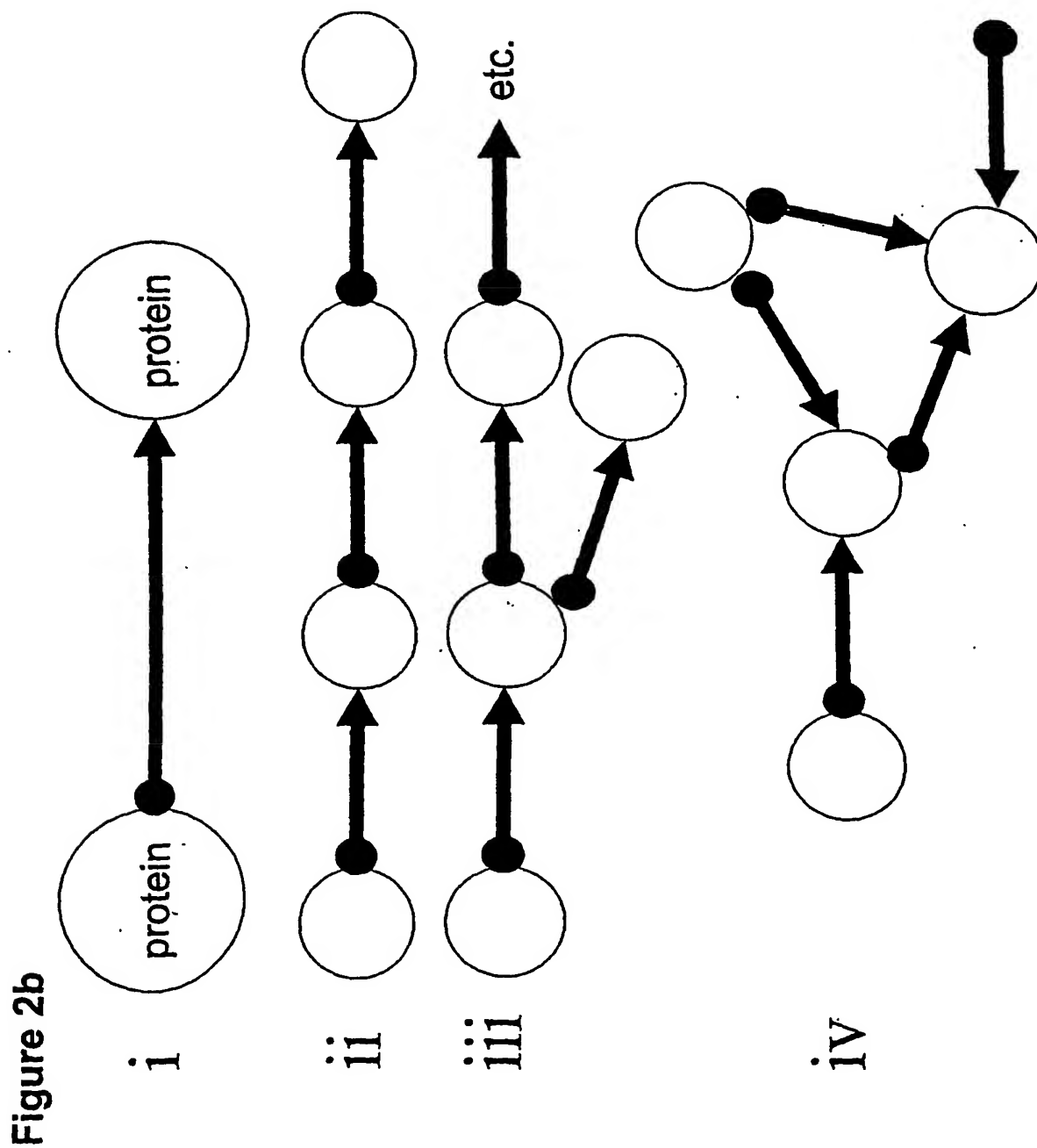


Figure 3

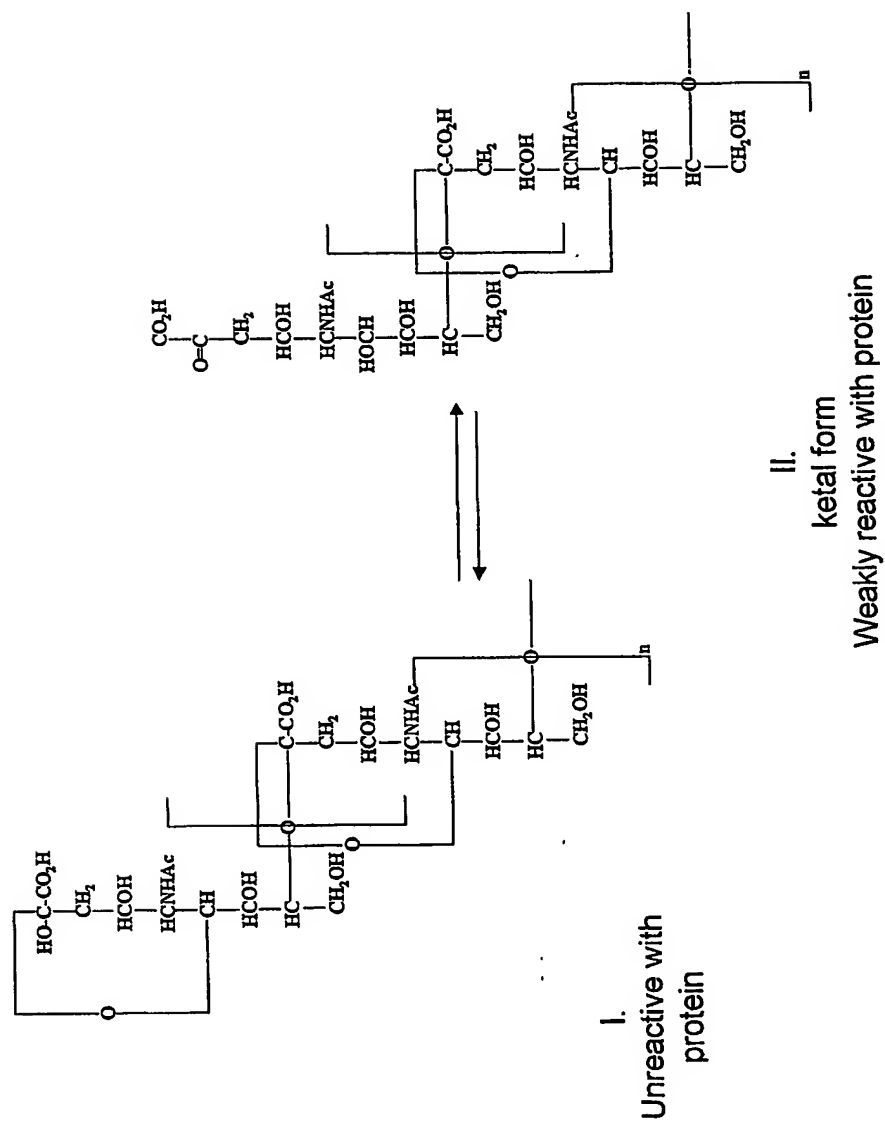
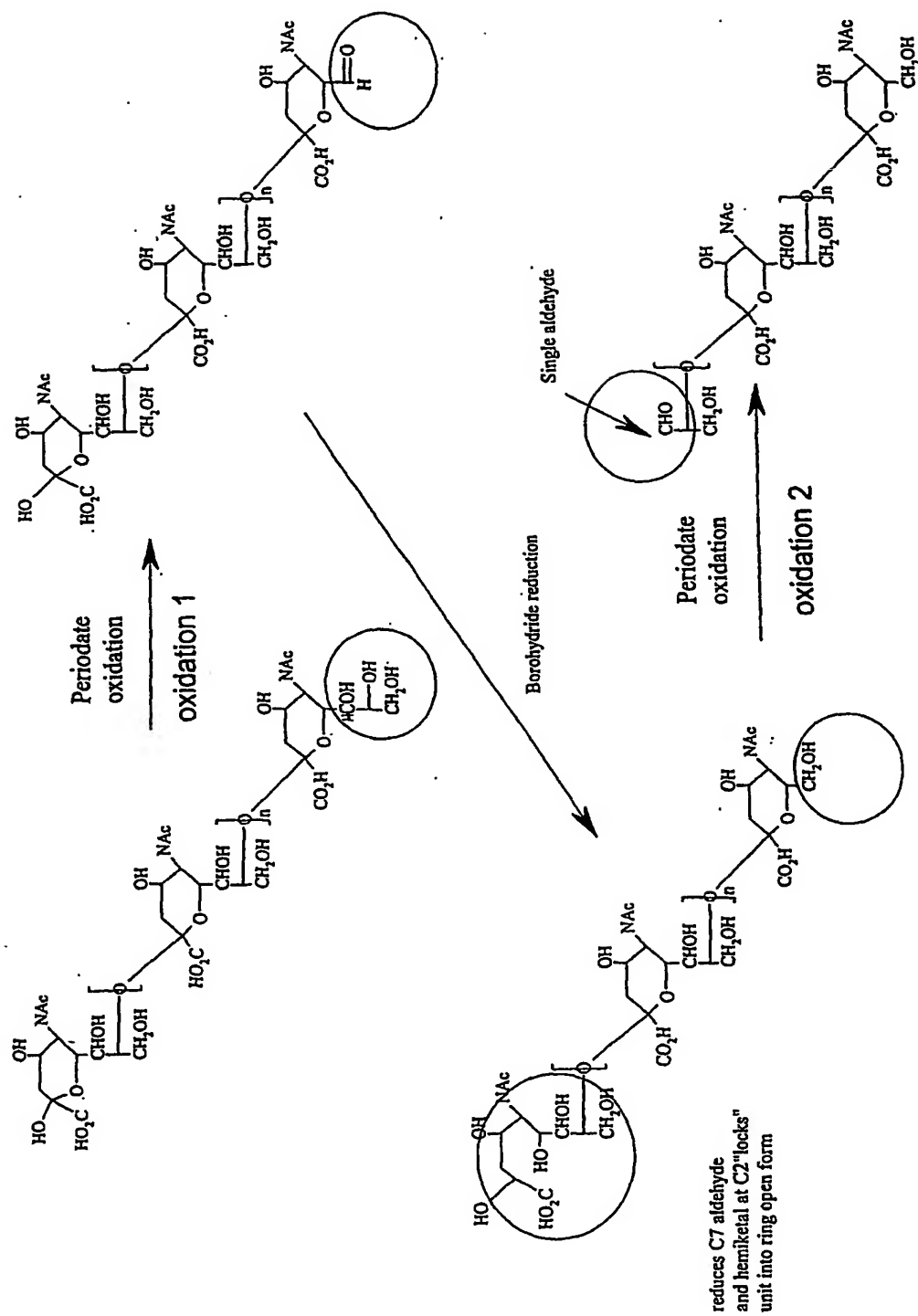
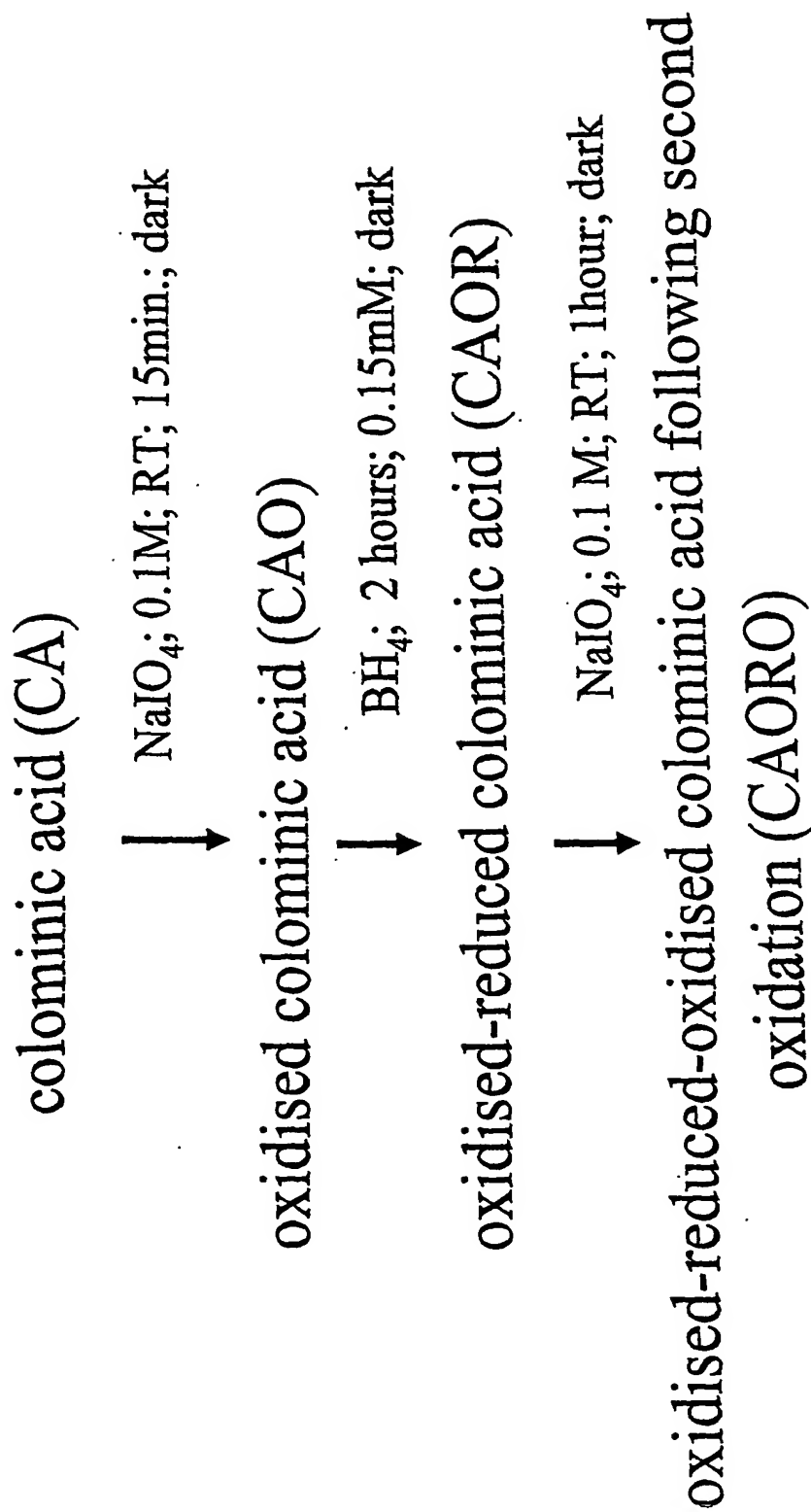


Figure 4a



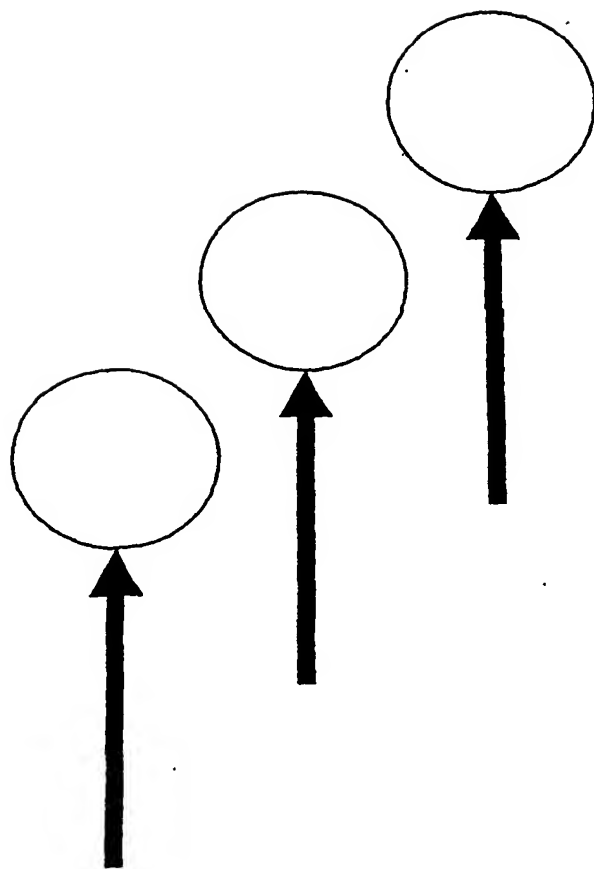
7/23

Figure 4b



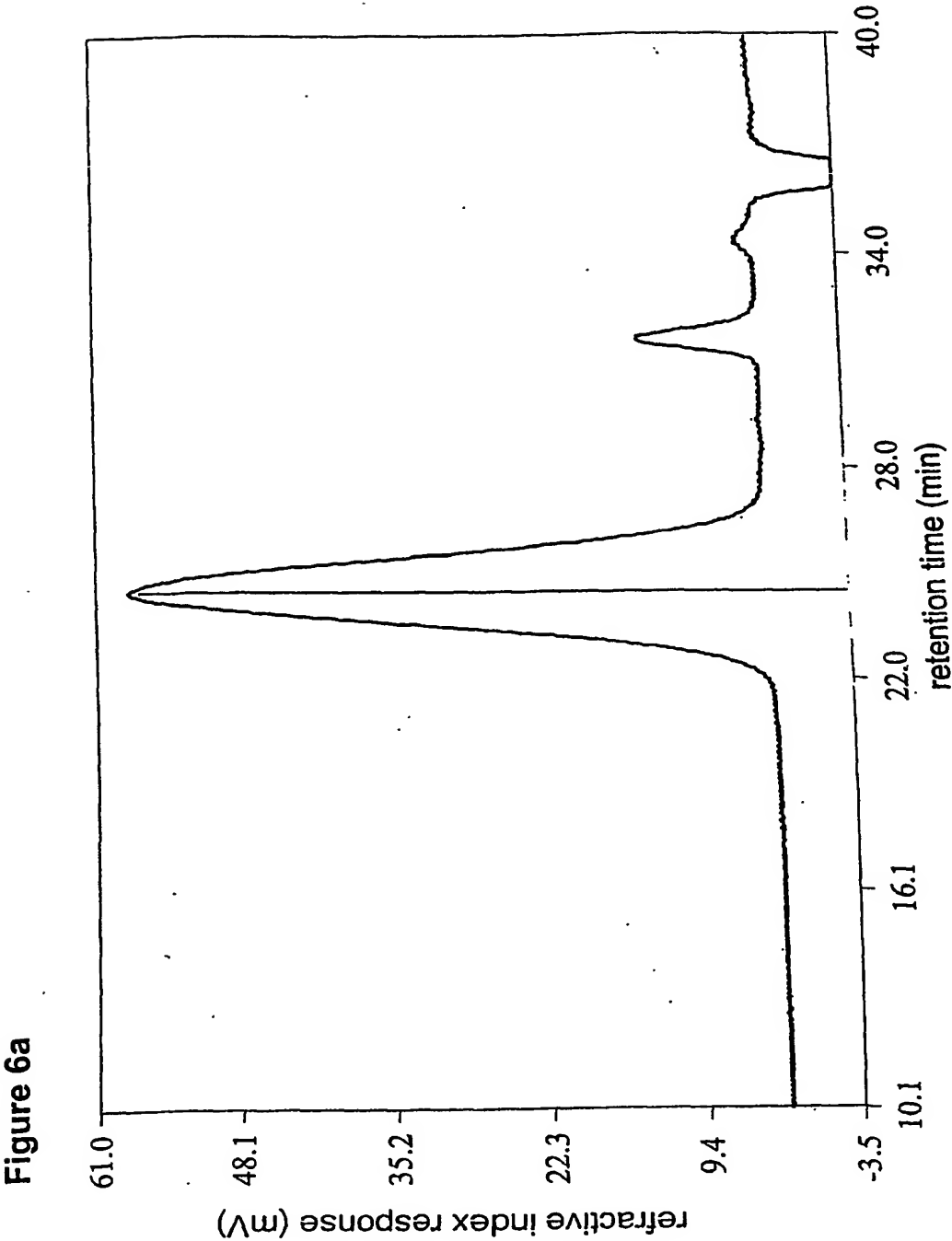
8/23

Figure 5

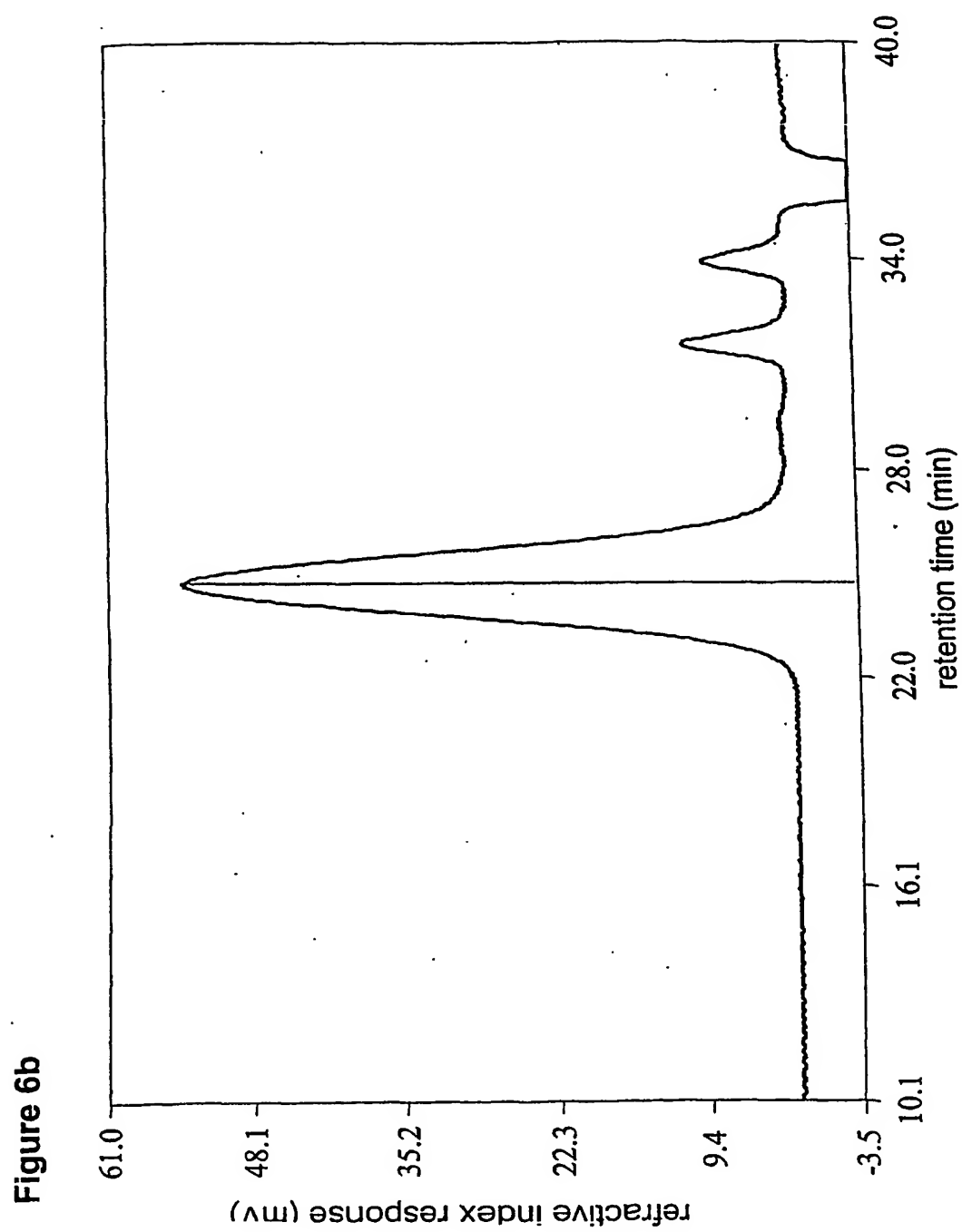


Monofunctional polysialic acid cannot form unintended by-products described for periodate-oxidised natural polysialic acid in Fig. 1





10/23



11/23

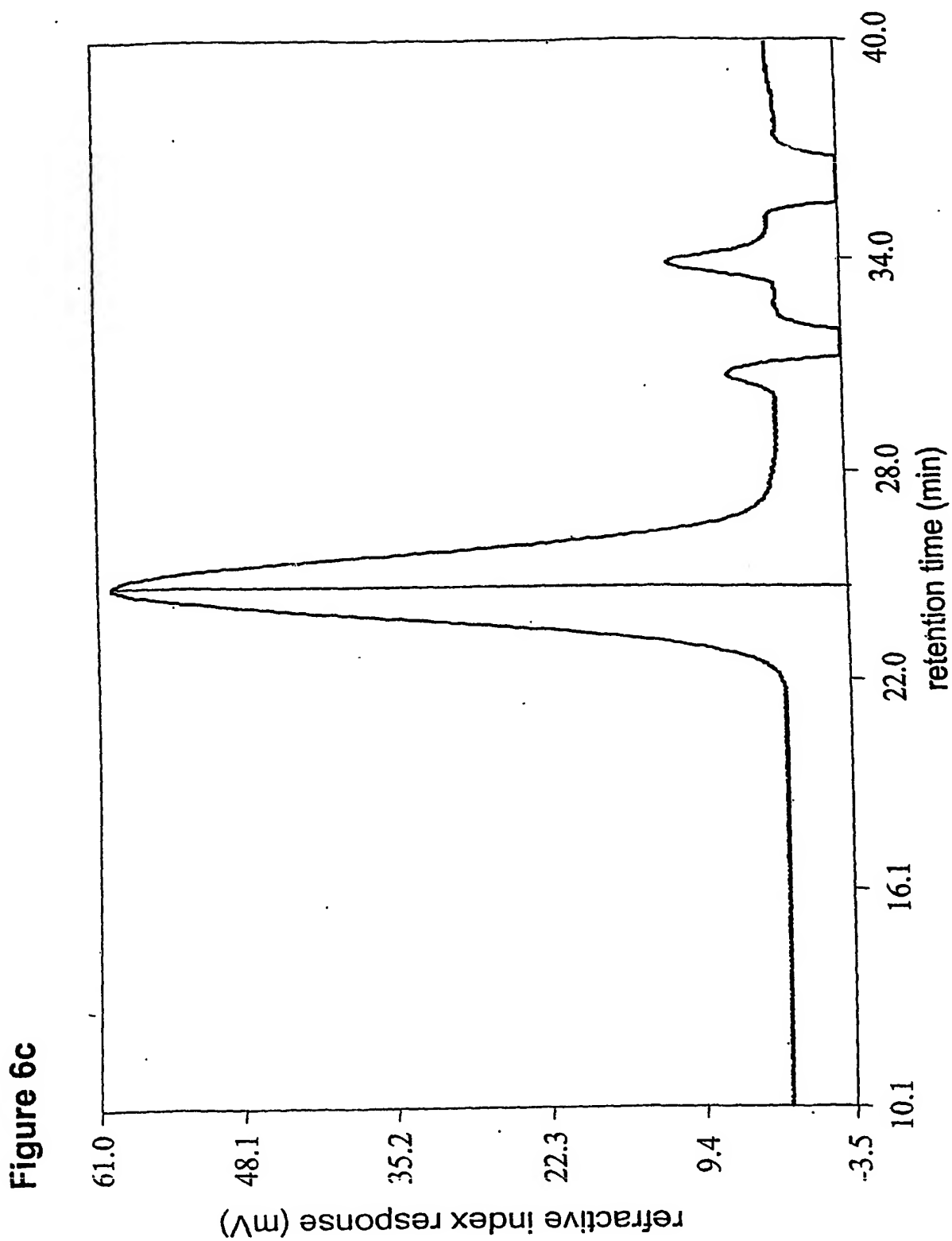
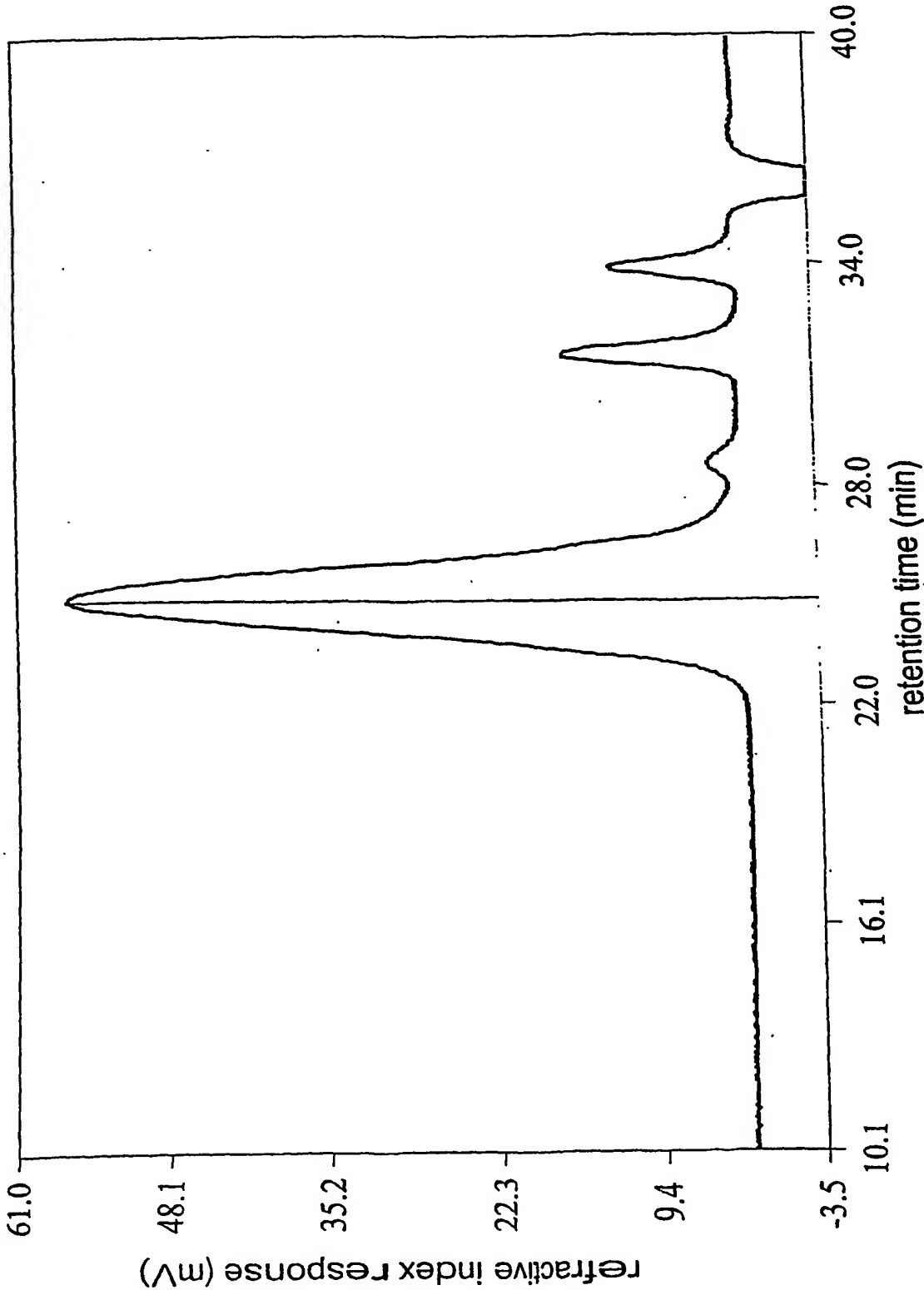


Figure 6d



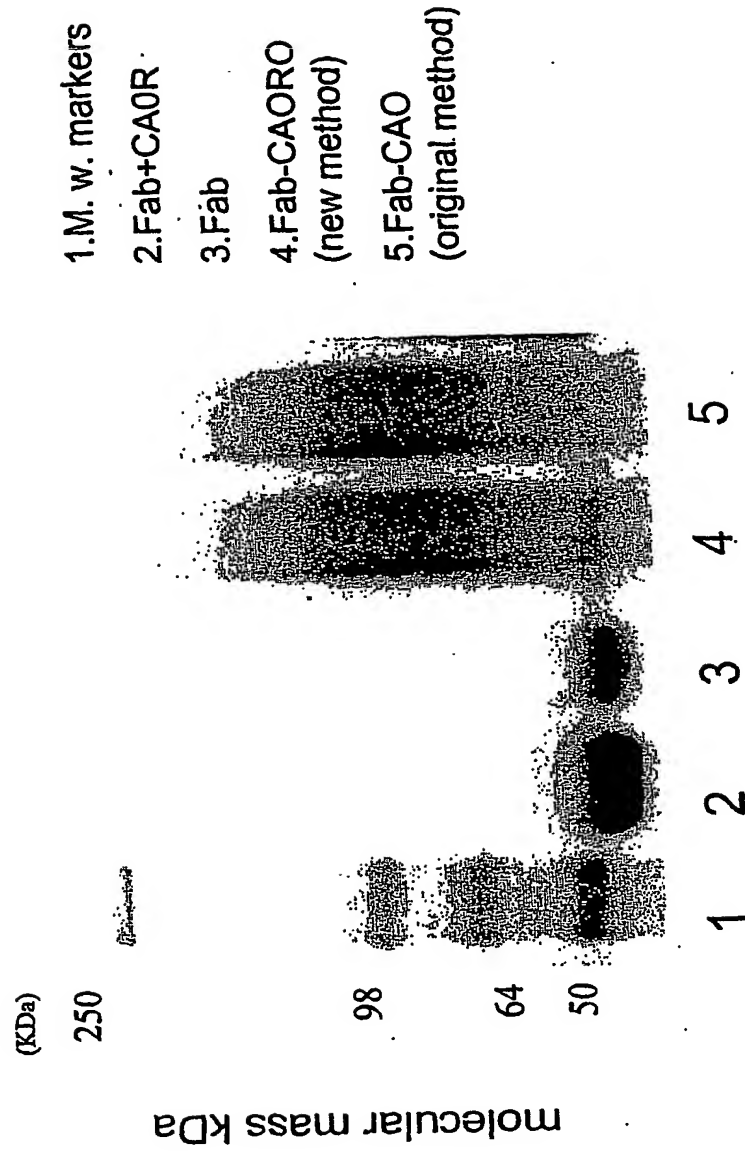


Figure 7

Figure 8

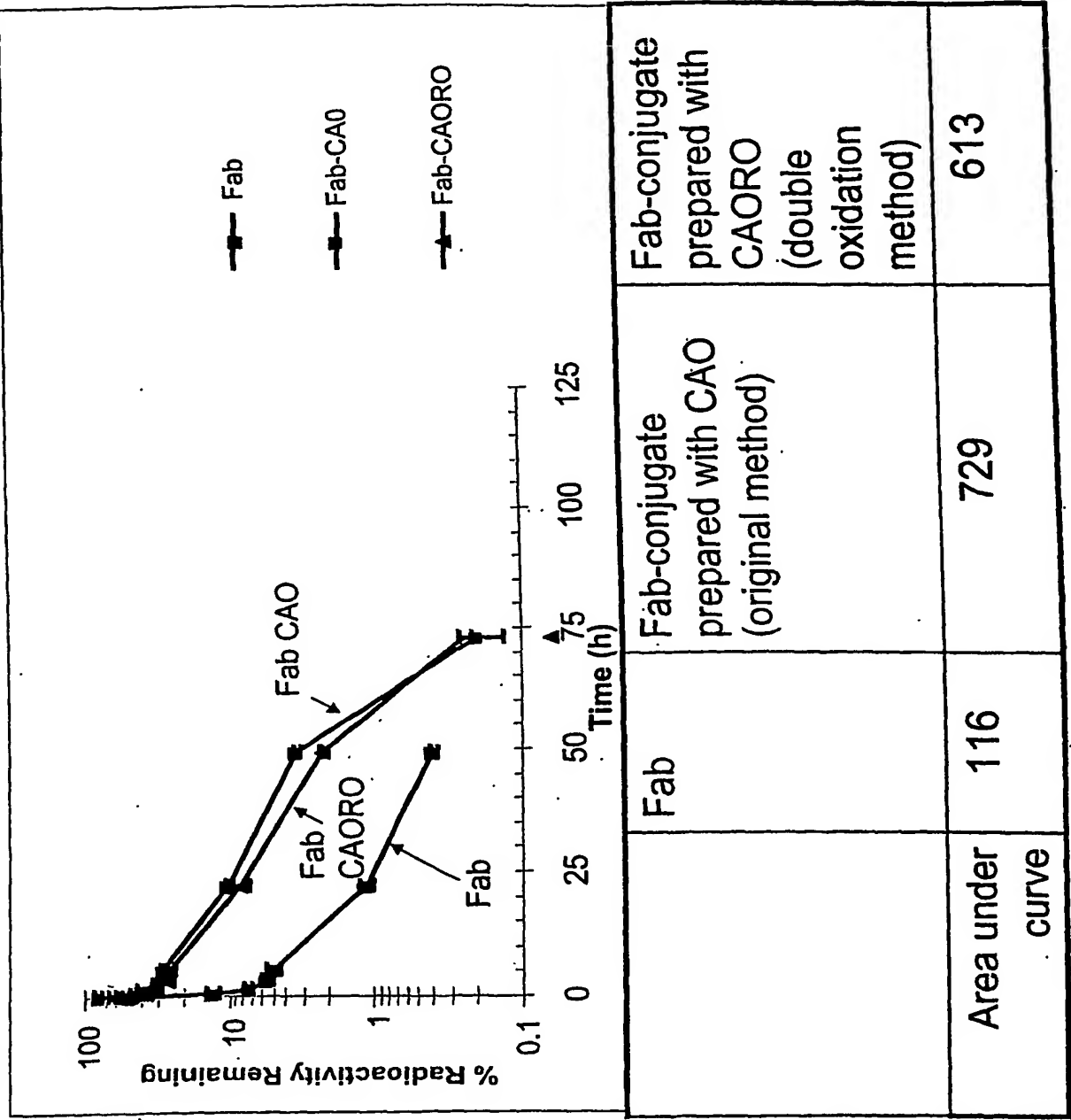


Figure 9

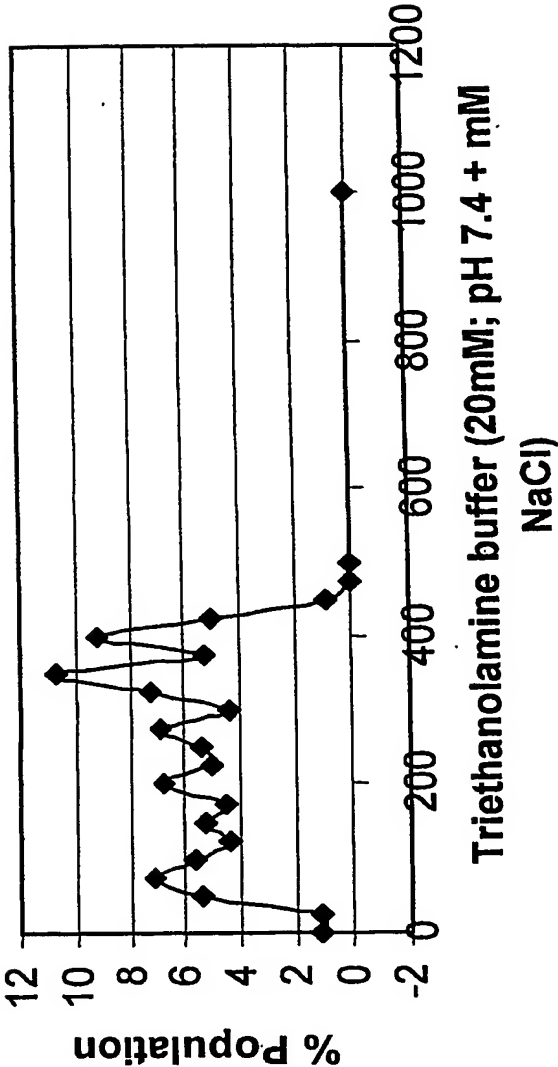


Figure 10: A typical native page of colominic acid fractions with m.w.  
(B = broad dispersed; N= narrow dispersed)

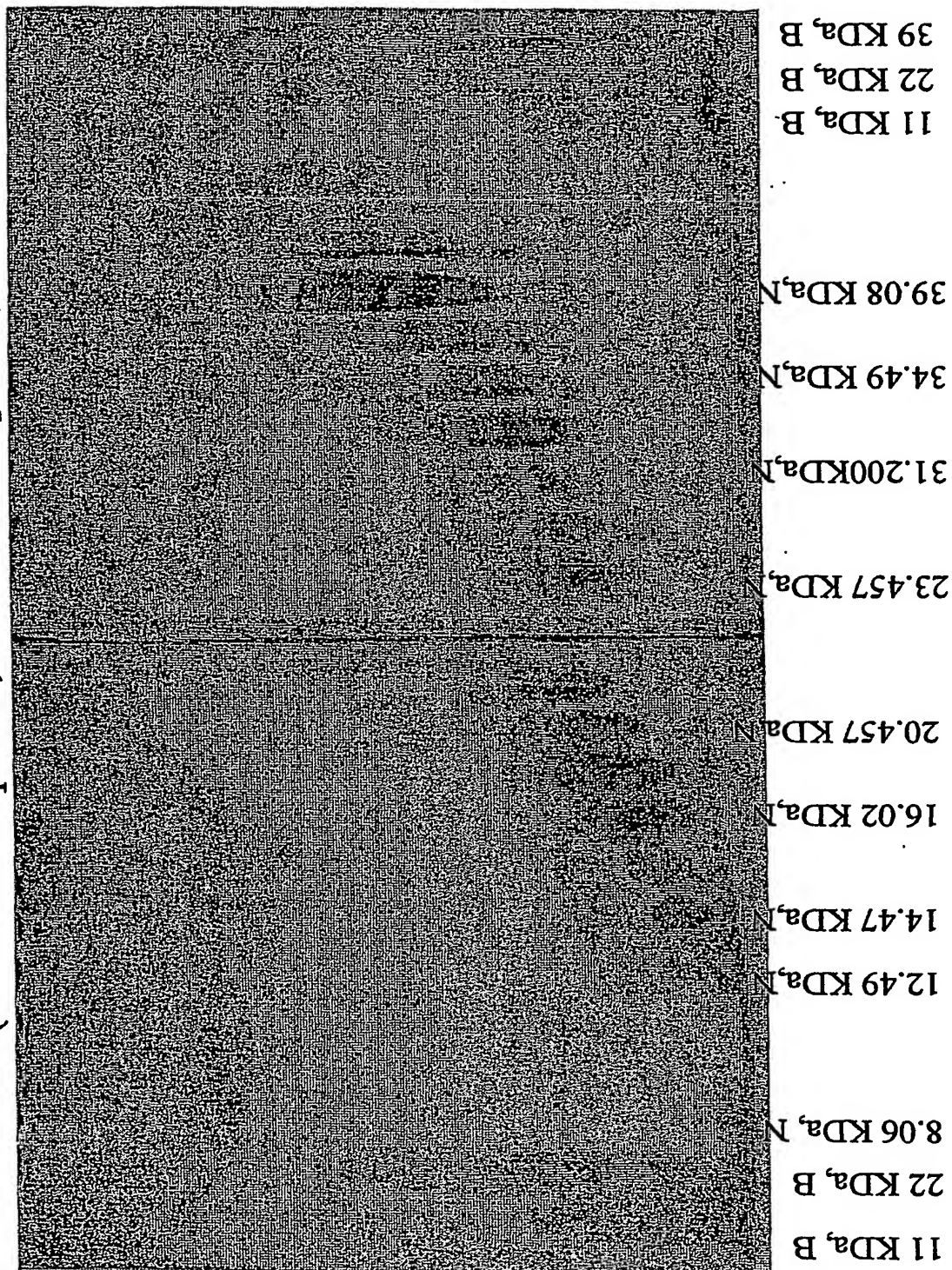
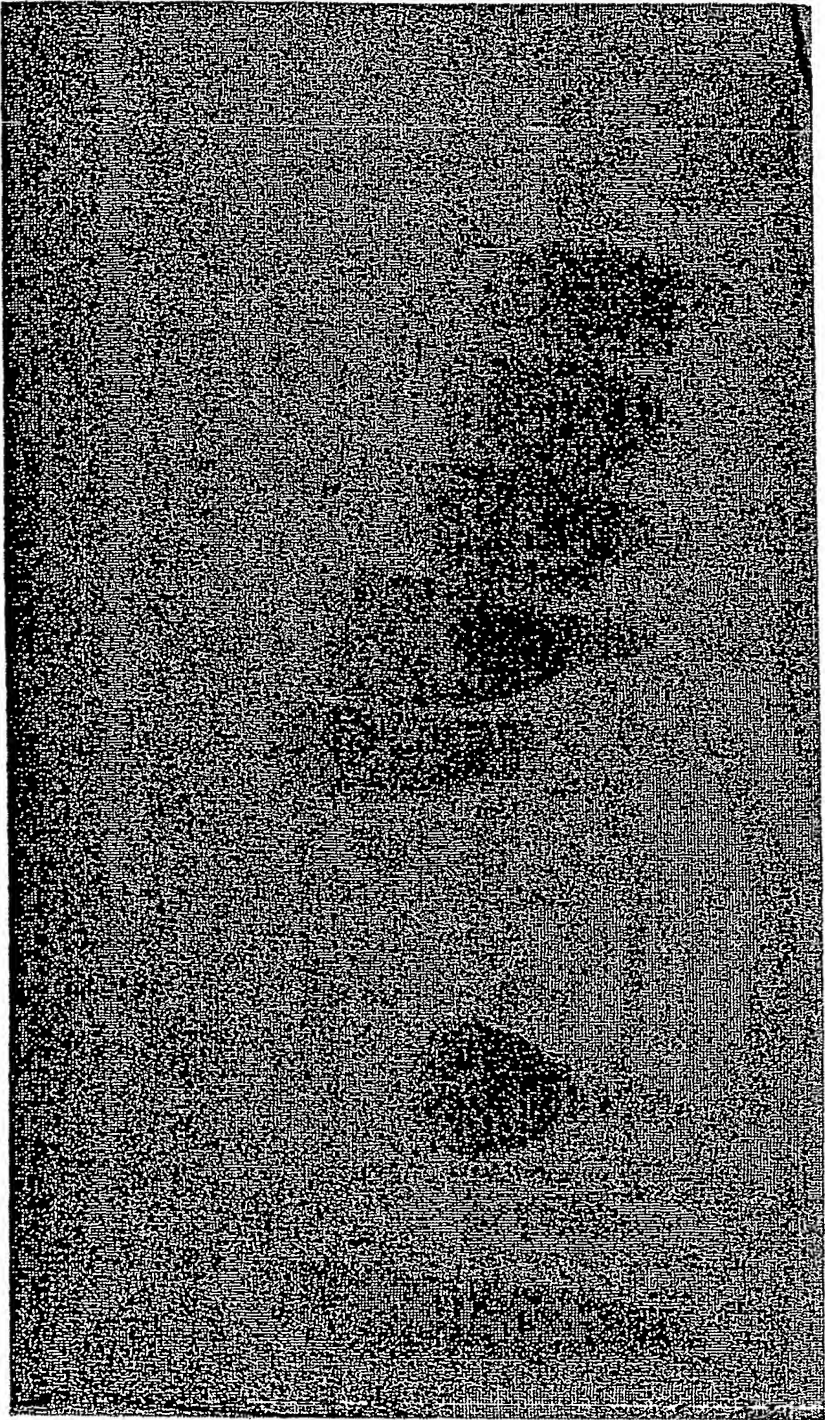




Figure 11



39K 22K 400II mM 450II mM 475 mM 450 mM 425 mM 400 mM 375 mM 350 mM 325 mM 11K

Figure 12: A typical GPC chromatogram for CA fractions

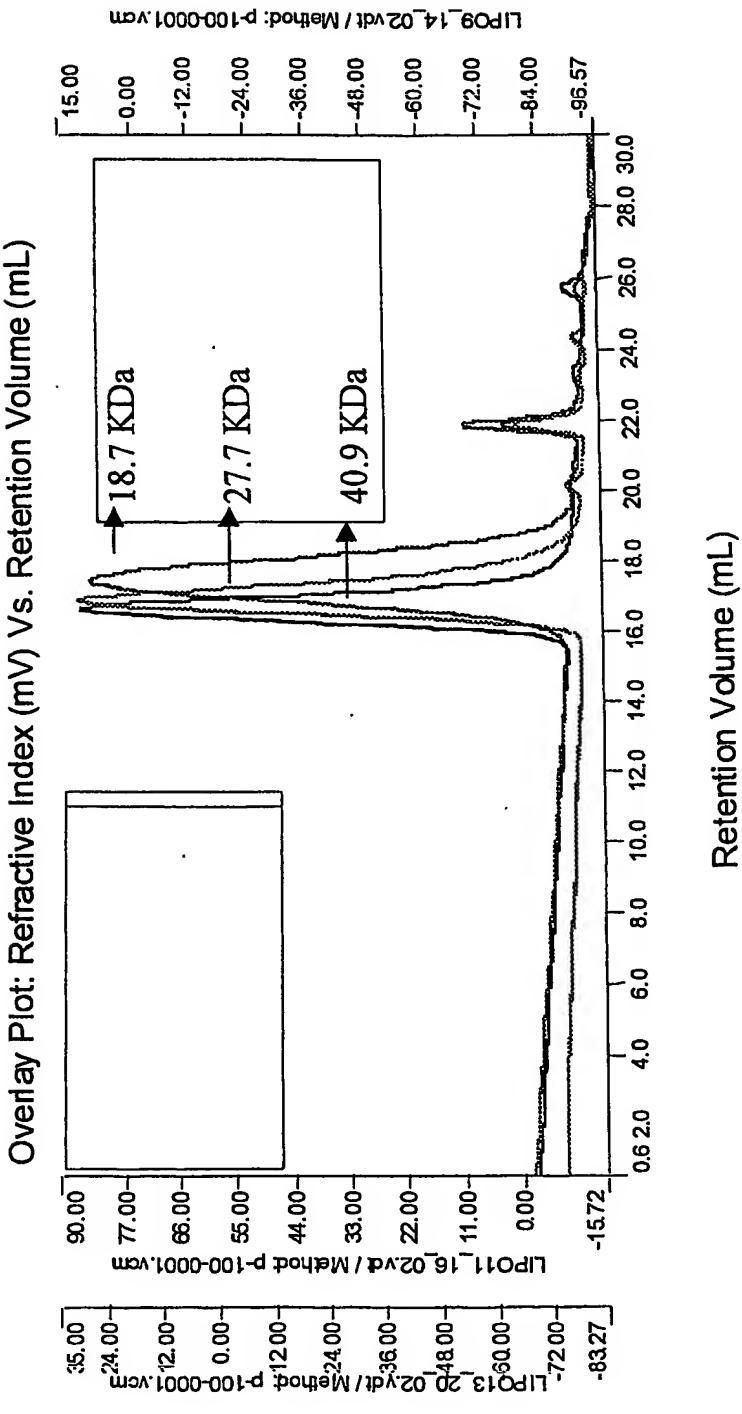
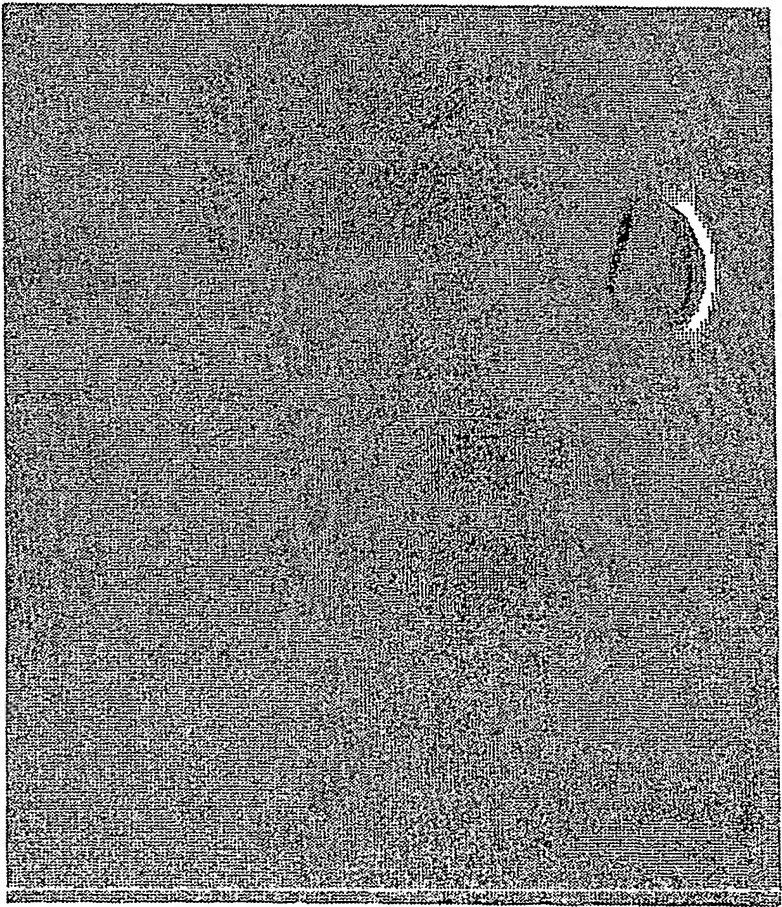
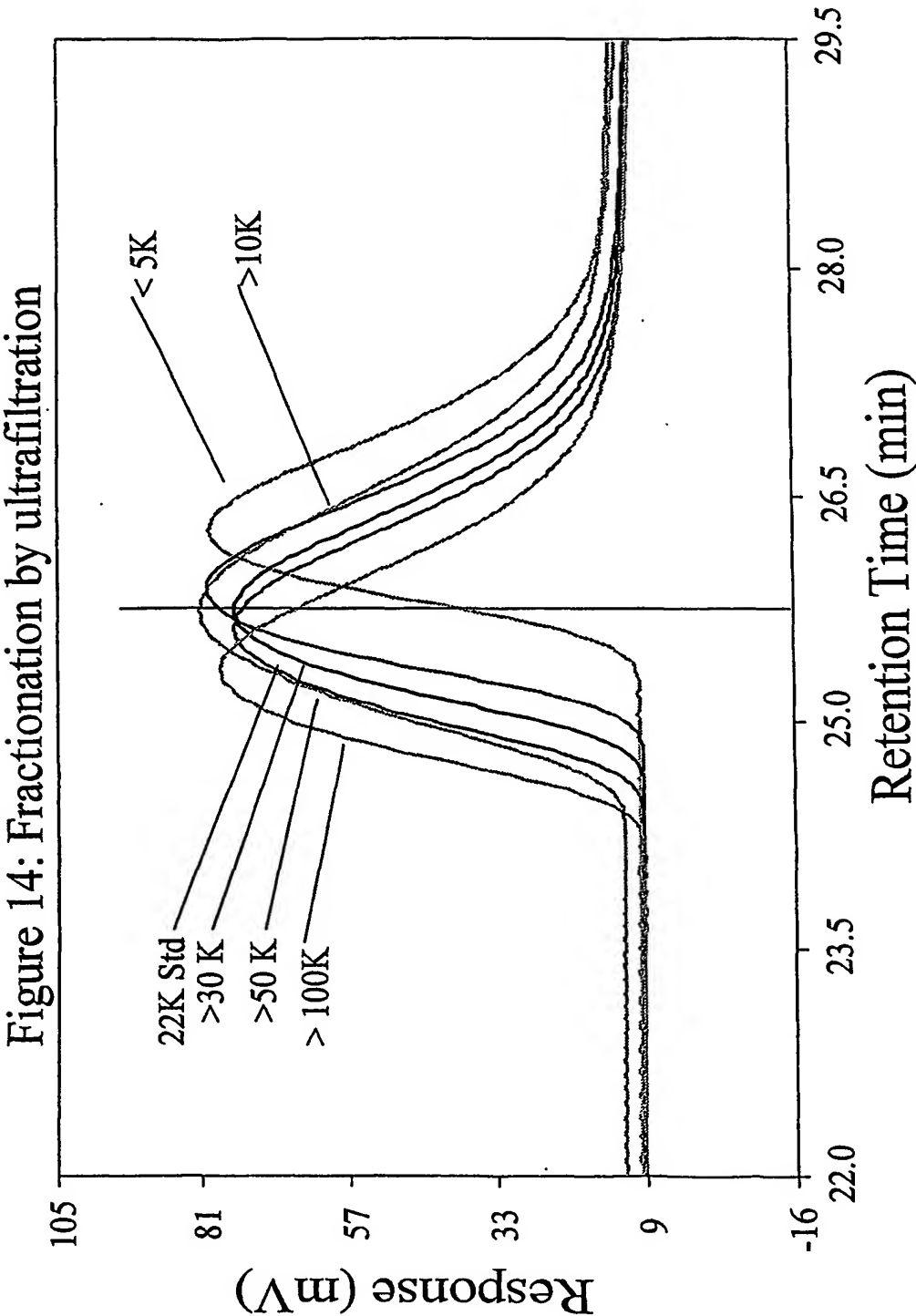


Figure 13 : Colominic acid samples from different steps of fractionation

- 1) 18.7 kDa disperse
- 2) 32.2 kDa from IEC
- 3) 32.2 kDa ultrafiltered
- 4) 32.2 kDa post oxidation
- 5) 40.9 KDa from IEC
- 6) 40.9 KDa ultrafiltered
- 7) 4.90 KDa post oxidation



1 2 3 4 5 6 7



21/23

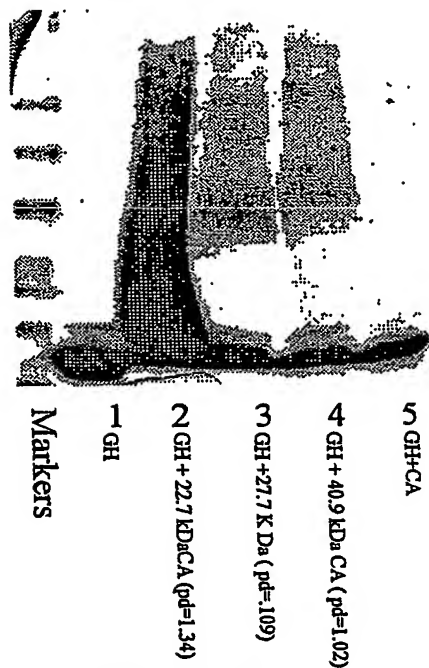


Figure 15

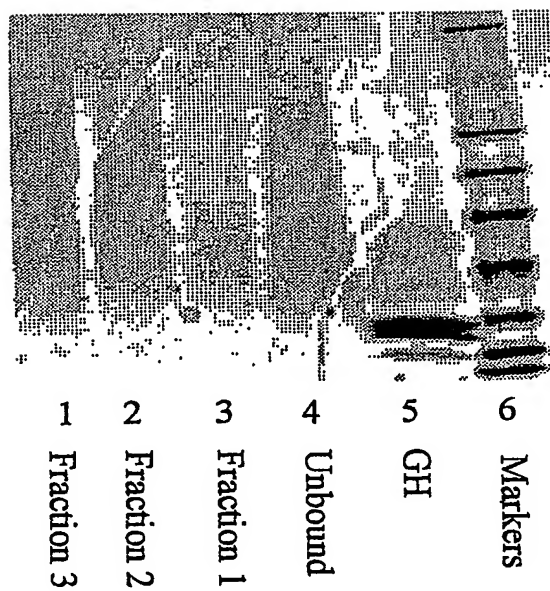
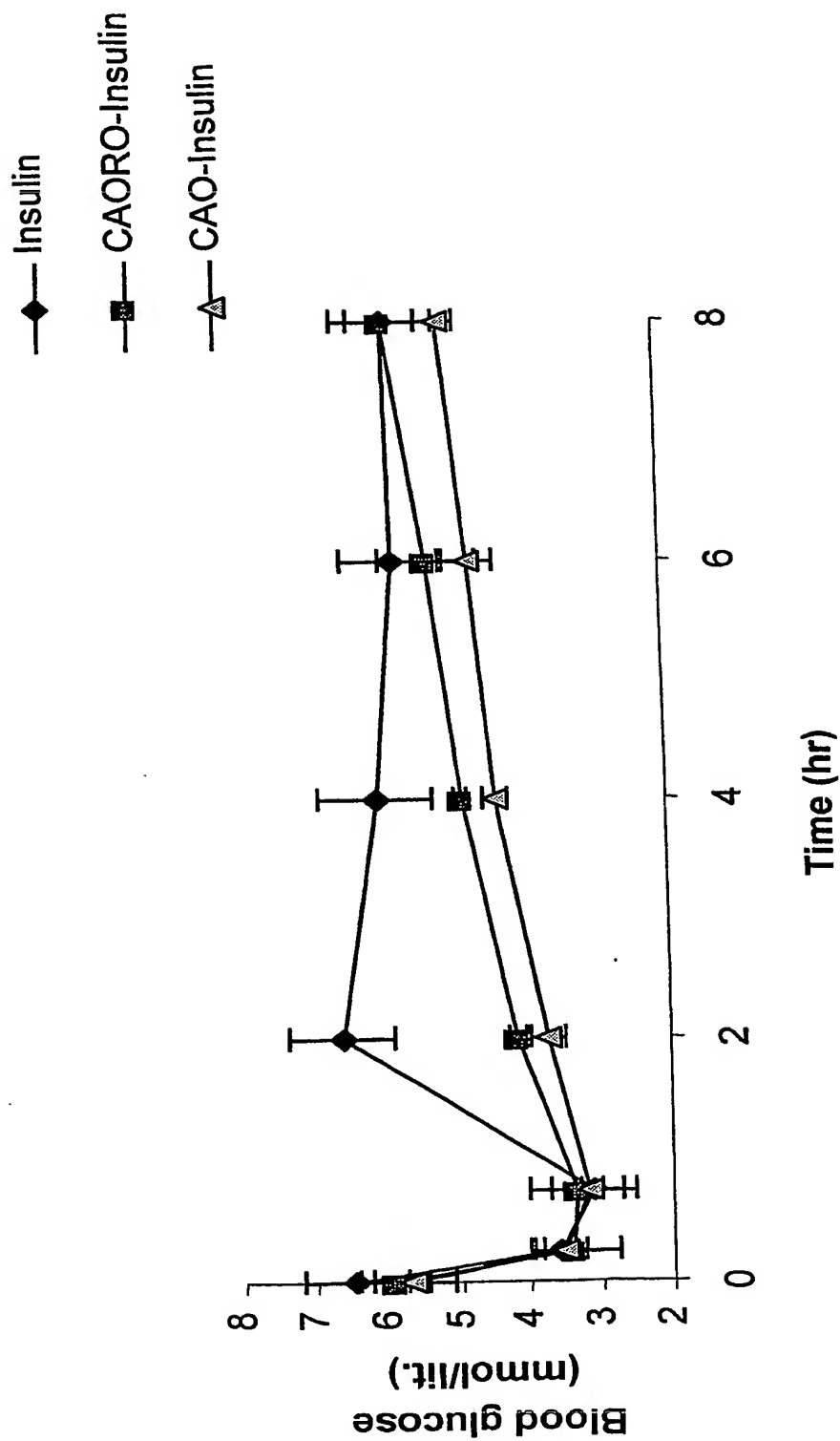


Figure 16

22/23

Figure 17



23/23

**Table 6: Ion exchange chromatography of CA22.7: Scale up (900 matrix)**

Sample (in 20mM Triethanolmine buffer+ mM NaCl, pH7.4)	M.W. (Pd) 12.5 g batch	M.W. (Pd) 25 g batch
350 mM	15490 (1.008)	10.470 (1.173)
375 mM	19960 (1.010 )	24659 (1.019)
400 mM	25829 (1.019)	29573 (1.018)
425 mM	33763 (1.023)	34160 (1.011)
450 mM	46880 (1.058)	44400 (1.013)
475 mM		28500 (1.376)